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DISEASES OF THE NERVOUS SYSTEM

A PRACTICAL JOURNAL ON PSYCHIATRY AND NEUROLOGY

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DISEASES of the NERVOUS SYSTEM

(PUBLISHED MONTHLY)

A PRACTICAL JOURNAL ON PSYCHIATRY AND NEUROLOGY

Group Psychotherapy

HOWARD P. ROME, LIEUT. COMDR. (MC), USNR

This paper attempts a description and analysis of a group psychotherapy program developed in the Naval Service for the treatment of what has been termed "combat fatigue."

The military service provides a unique, ready-made setting for the conduct of group treatment. The situation is controlled and free from extraneous difficulties which beset a civilian psychotherapist. For one thing, the military psychiatrist's patients are in residence in a hospital for as long as he deems it necessary. The economic aspect of medical care, with all of its untoward therapeutic features, is absent. The adjunctive facilities are as well developed as scientific resource and technical ingenuity can make them. The patients chosen to participate in this special regimen have a great deal in common. On a gross circumstantial scale they are all members of the Naval Service; they all have participated in combat and all have developed the presenting syndrome as a sequel to battle experiences. Insofar as reaction is concerned, their syndrome is characterized, at least superficially, by more or less anxiety with a greater or lesser degree of affect involvement and attendant physiological manifestations. And finally from the standpoint of social cost, their symptom picture is of sufficient severity to render them unfit for duty and place them in a hospital on the sick list. All of these points of similarity are important prerequisites which fit them for participation in a Group Therapy program designed to meet the needs of the Naval Service.

The goal of the program is clear-cut even though it is limited in its scope. Its primary objective is to return the patient to a duty status sufficiently recovered to be able to render further effective naval service. It must be remembered that the limited time available for definitive therapy, considering the exigencies of the Service, alters the attention which otherwise might be given to other aspects of treatment.

It is obvious that many of the features of a satisfactory military program are not equally applicable to every civilian analogue, and therefore it is an open question as to whether the specific conclusions which have been drawn may be valid for conditions which are not basically similar. However, it is fair to assume that many of the technical problems of group therapy with which military psychiatry has been faced, are met with equal frequency in any group psychotherapeutic situation. Such phenomena as the patient-doctor and patient-patient relationships are common to every group method. Group cohesion, fragmentation and stratification take place with similar frequency under relatively the same circumstances in the life history of every human social organization. The manner in which

* Presented at a meeting of the Washington-Baltimore Psychoanalytic Society, March 10, 1945, Washington, D. C.

certain psychopathologic devices are worked out and explained collectively is fundamental to all groups with therapy as their goal and purpose. So it can be seen that the closer the approach to the generic bases of group therapy, the less difference attaches to the specific elements which may be unique for children, or psychoneurotic civilians, or combat-fatigued soldiers, sailors and marines.

It is now well understood that there is a distinction between group therapy and therapy in a group. The former uses the amalgam of the group (its modal personality) as the basic material to be dealt with. This concept of a modal personality is a convenient frame of reference for the group therapist's theoretical discussions. It is an abstraction which has been most frequently employed in anthropologic discussions. Only of late has it been used in the formulation of psychiatric concepts applicable to groups of patients. It may be used as a kind of statistical description of the central personality tendencies displayed by the individual members of a particular group. As employed by DuBois, the modal personality is a product of the interplay of fundamental physiologic, psychologic and neurologic determined tendencies and experiences common to a group of human beings who are acted upon by certain social forces which deny, direct, and gratify their needs in different ways under different conditions. Horney, Kardiner, Fromm, Linton and others have used this same concept in their formulations, referring to it by such terms as "social character," "basic personality type" and the like. The present use of the concept is restricted to smaller groups, structured artificially for the purpose of psychotherapy.

Group Therapy is, in part, a therapy directed towards a change in the modal personality of the particular patient-group selected for treatment. Essentially it consists of tracing through with as much consistency as possible the repeated and standardized experiences common to the group, ferreting out the nature of the relationships and the values given them by their culture, shifting as these do in many contexts when the individuals' physical and personality resources vary. An effort is made to try to provide the group with a sense of time-values for the proper handling of their traumata. Important though they are, it is felt that early experiences do not exclusively determine the mature character of the individual so that it is forever thereafter impervious to subsequent influences. Nor by the same token does the advocating of group therapy or its theoretical bases imply that the treatment of individuals can be reduced to a level of stereotyped standardized uniformity. Naturally as much specificity as possible in the form of individual interviews which can supplement the group therapy, is a most welcome personal addition for each patient.

All that is hoped to be accomplished by the group technique is to help each participant to define his emotional stability in terms of the norms or values of his particular social group. For a man is stable or unstable not in a vacuum but by reference to the specific value which his culture and his immediate group prescribes. Recovery, which implies the regaining of emotional stability or the achievement of a more satisfactory social adjustment, depends not only upon an analysis of the nature of the deviation but also upon a positive and successful synthesis—psychological and sociological. Group therapy tries to accomplish this synthesis by an approach to the patients through their points of similarity—similarity of complaints and symptoms, and personality patterns and underlying dynamics. It presents material of sufficient generic validity to the group so that an emotionally vested interest is assured by each participant. It capitalizes on this similarity early in the formation of the group when it is relatively amorphous, by carefully selecting the participants. The selection is based on the symptomatology which they have in common. This gives the group a cohesion based almost solely on mutual curiosity and mutual interest. Here for perhaps the first time in their lives, sick or well, they have the opportunity to hear and see and speak freely with persons who are reasonable facsimiles of themselves.

To return to combat fatigue, the possible

variants of reaction to battle stress are sufficiently few to permit a therapist to select a small group of marine patients who have in common such features as upper gastrointestinal reflections of chronic anxiety, irritability, guilt and depression, startle response, and night terrors. With this admittedly superficial symptom picture as an entering wedge, the barriers of psychological isolationism can be breached and then the therapist can proceed to translate these obvious common symbolic reflections into basic terms of the more subtle dynamic mechanisms which the patients soon learn they also have in common. These they accept with relatively less resistance because the burden of responsibility for the acceptance is lightened by a growing identification with a group of equals, palliated by the feeling that all of the others are similarly affected. This change in group dynamics permits the therapist access to the core of the group's reaction.

There are many advantages in the group approach. On initial contact it would seem that the time saving element should rate first, but although it seems to be group therapy's most distinguishing asset, actually the benefits derived from it per se are of less importance than for instance the ultimate adjustment value derived from the social participation and integration which coincides with the patient's acquisition of understanding. Group therapy designed to promote the development of dynamic insight takes time. Ultimately the success or failure of any psychotherapy is measured by the psycho-social benefit it provides the patient in his future interpersonal relationships. Hence, if these interpersonal relationships are planned so that they are an integral part of the emotional growth and development of treatment, two objectives—analysis and synthesis—may be accomplished at the same time.

Earlier in this paper it was stated that there is a distinction between Group Therapy and therapy in a group for the reason that all therapy conducted in a group setting is not necessarily group therapy. The quality of the patient-doctor relationship is the key to the difference. In true group therapy, the therapist participates as a catalytic member of the group fulminating the interpersonal relationships without becoming involved to the same degree that he would be in the ordinary individual treatment situation. The patient-to-patient valence is the significant one in that it not only brings about a kind of internal adaptive behavior within the individual but also is reflected in the changing character of the modal personality of the group. In this way, a cycle of mutually beneficial influence is established, the member affecting the group and the group acting to alter its members. As a matter of fact, it is just this aspect of group therapy which has been the cause of its being labeled and rejected by some persons as being a superficial and cover-up treatment.

There is a sound philosophical and psychological basis for the contention that, generally speaking, the motor consequences of mental life, action and behavior relationships, are the important ones in the creation of an integrated, adjusted social life and that successful psychiatric treatment may be insured as well as measured by the quality of the social behavior of the patient. Specifically, men are judged, fail or succeed, are happy or miserable in direct proportion to what they do and how they do it. There is a distinct inability to successfully dissociate for long, behavior and its underlying mental attitudes and ideas which are responsible for the behavior. Perhaps the most characteristic attribute of psychoneuroses and mental illness is the effort at a symbolic compromise between basic personal attitudes in conflict with acceptable approved behavior. A form of psychiatric treatment which utilizes every psychological lever to bring about a spontaneous socially adaptive behavior is likely to be more successful than one which assumes that profitable social adaptation is a result which is outside the province and direction of psychotherapy.

Once the links of inter-relationships are established in the group by propinquity, by the mutual sharing of confidences, by the cohesion of common effort directed toward a common goal, the superficial characteristics which were responsible for the early

cohesion no longer dominate as a central tendency. The facade of symptoms is subsumed in the process of group unity. The modal personality of the group assumes a different set of characteristics which can be thought of as its least common psychological denominator. At this stage of progress there is a greater tendency for conformity with the general culture. The symbolic overcast of symptoms is automatically stripped away and the fundamental pre-illness potentialities begin to manifest themselves in response to conducive environmental stimuli.

In the eyes of the therapist, the therapeutic group is a large projective medium reflecting predominating personality mechanics in much the same way that symptoms are the projection of personality mechanics on an individual scale. This magnification serves the therapist in two ways. It affords him an opportunity, which he lacks in individual therapy, to evaluate his patients with regard to the additional dimension of social adjustment; at the same time it provides an experimental medium for the patient in which to actualize his potentialities for social adjustment at a decreased risk.

This trial experience of active participation is especially important, for without it the group sessions are merely classroom lectures in mental hygiene without much personal profit for an emotionally disturbed person. Reconditioning and learning are facilitated by doing. When patients have an opportunity, albeit on a miniature scale, to participate in the shaping of their own emotional futures, there is as Klein puts it, a shift from the wish to the deed, from the purpose to the motive, from the yearning to the striving. There are a number of motivating incentives. There is a status motive, a competitive motive, as well as a motive which Angyal calls a "trend towards homonomy," all of which tend to make the individual differences congruent and in that way devaluate them.

The methods of communication by which group synthesis and production can be stimulated are many. However, this discussion will be restricted to the use of a relatively new medium—motion pictures— to introduce provocative stimuli.

The use of specially prepared audio-visual aids for psychotherapeutic purposes is an entire new field in itself. The experimental use of these films by the Navy has at least established the fact that they can play an important part in quickly creating the emotional tone in a group which leads to the rapid development of a wide range of different patterns of adaptive and projective behavior.

The film "Introduction to Combat Fatigue" is one of a series of experimental motion pictures made for the Bureau of Medicine and Surgery under the auspices of the Training Films Division of the Bureau of Aeronautics. Its uses exceed those which were originally anticipated. Its role as a training film for the indoctrination of personnel adjunct to psychiatric treatment is obvious. It has been helpful also as an educational medium for the information of nonpsychiatrists, line officers and medical officers alike. Its use in regard to patients has been varied depending upon the circumstances under which it is shown. For the most part, it has been used as a keystone around which group discussions center.

There are a few background details about this film which are germane to this discussion. The explosive sounds have been muted and the doctor interrupts the continuity of presentation by calling attention to the noisy scenes. Originally two sound versions were made and both of these were shown to selected groups of patients. Their reactions to the full sound version indicated the necessity for decreasing its intensity. As has been pointed out by many others, patients with untoward psychological reactions to combat, tolerate poorly sudden noises. They exhibit startle responses, are precipitated to run away or hide, or vomit, scream, have diarrhea or urinary frequency. With sound tolerance as just one of the audience reactions to be tested it was decided to poll groups of patients to determine their personal reactions upon seeing the film at a number of different response levels. Accordingly to date somewhat over 1,000 patients have been individually interviewed concerning their reaction to the film. These results will be reported in detail at some fu-

ture date. A representative summary of the findings is as follows:

Immediately after seeing this film most patients state that Edwards' problem was very similar to their own and that seeing Edwards' problem presented in a dynamic sequence gave them some clues to their own. Almost every patient expressed the desire to ask more questions of other patients as well as of the therapist. A great majority said that they never before appreciated the fact that their reaction was not strange, unique and bizarre. Almost all except those men who were in the final stages of recovery said that the picture upset them somewhat. This was further indicated by the increased incidence of night terrors and such things as the exacerbation of quiescent anxieties and the recurrence of visible tremor and subjective anorexia. The provocative value of the picture persists for some time and this is shown by follow-up questionnaires and interviews at later dates.

It seems to be the concensus of opinion that when the film is shown early in the course of group treatment the initial gelling of the group, so to speak, is hastened. This would seem to indicate that it stimulates identification and empathy as well as providing a background of general information about the subject.

As can be readily imagined, there are numerous aspects of the film which lend themselves to group discussion. For example, the major character's psychosomatic symptoms of anorexia and vomiting are points at which the group can be led into a discussion of their own organ language. "How-do-you-act-when-you're-fed-up, when-you-can't-stomach-any-more?" sort of questions.

The acceptance of a fear response as a natural reaction to appropriate stimuli is a point which most of the men feel that the cat and dog sequence is able to facilitate by illustration. As one of the patients said, "Seeing the picture made me for the first time realize that I wasn't just peculiar in acting the way I did. Now I'm beginning to understand why some of these guys act the way they do. And the funny part about it is that I can see me doing the same damn thing."

There are a number of aspects about this film which are now known to be wrong. But granting these imperfections, the film has proven its worth as an additional instrument in the group therapist's armamentorium.

There are several more films in this series in the process of completion. The problems of insomnia, irritability, the discharged NP patient and psychosomatic medicine are some of the subjects which are treated. Although it is premature to predict, merely from a preview of these newer films, it appears that the experience gained from the first venture will be most valuable in the future. It seems fair to assert that motion pictures can facilitate group therapy by providing an experiential frame of reference which can be used for projective and integrative purposes.

In summary, as Freud stated in Group Psychology and the Analysis of the Ego, "the more important is a common quality shared with other persons, the more successful may a partial identification represent the beginning of a new tie based on an emotional common quality." Further he adds, "It appears that where a powerful impetus has been given to group formation, neuroses may diminish and at all events temporarily disappear. Justifiable attempts have also been made to turn this antagonism between neuroses and group formation to therapeutic account."

The present program has attempted to utilize this antagonism in a strictly limited way. The dynamics which underlie its operations require much more penetrating analysis in many different directions. Nevertheless, it seems safe to predict that a socially oriented psychiatry in the future will be forced more and more to the exploitation of all sorts of group methods not only for the therapy of neurotic individuals but also on a large sociologic scale for the understanding, organization and administration of mass psycho-social problems which every community is recognizing as a barrier to its further social progress.

AUTHOR'S NOTE: The opinions contained herein are the personal ones of the author and should not be construed necessarily to reflect the official attitude and policy of the Navy Department.

The Use of Pentothal Sodium as a Psychomotor Depressant In Electro-Shock Therapy*

H. S. RUBINSTEIN, M.D.
Baltimore, Maryland

For the past six years shock therapy has been given extramurally to patients who because of their cooperation and manageability can successfully be handled in this manner. Occasionally a patient who had been quiet and manageable before treatment would react with such marked psychomotor activity that commitment to an institution was necessary. It is true that such overly excitable patients would quiet down in one half to one hour following the "shock" but during this interval the shouting, restlessness and even combativeness were such that restraint outside of an institution was practically impossible.

It had already been found in the less violent reactions that intramuscular injections of dial (2 to 4 cc) would hasten the return to calmness. In particularly violent reactions, however, the demands for restraint became so immediate and pressing that a more quickly acting depressant was required.

It has been observed that pentothal sodium could be safely given as a preliminary to electric shock therapy.[1] The drug therefore was tried with success in the management of post-convulsive hyperexcitability. The following report describes the application of this method.

Case Report

L. W., white male, 60 years old was first seen Dec. 12, 1944 when he disclosed the characteristics of a typical depression and marked hypochondriasis. Up to 6 years previous the patient had been a successful exporter in Vienna. Upon the German Anschluss with Austria he was confronted with a Gestapo demand for an exorbitant amount of money within 4 hours under threat of being sent to a concentration camp if he failed. When his visitors left, he fainted and on being revived, displayed marked anxiety followed by depression. In this state he left his home, wandered about for several months, worked at whatever job he could find and gradually regained his composure. He managed to come to the United States five years ago and took a factory job. Shortly thereafter he sustained a rupture. This representing a threat to his economic security, he again became depressed. Several months later he recovered and managed to get along well enough until he began experiencing symptoms of prostatic hypertrophy. He again lapsed into a depression, recovered after several months, underwent a prostatectomy and again became depressed. As he emerged from this depression he became more and more hypochondriacal and six months prior to his first visit he had become so overconcerned about his health that his spirits sagged, he began having crying spells, lost his appetite, became constipated, lost weight, became sleepless, sexually impotent, lost his ability to concentrate, lost interest in his job, friends, reading and all other activities. The entire content of his thinking was concerned with his health, his recently acquired weakness and the hopelessness of his situation. He appeared much older than his sixty years, was moderately arteriosclerotic but was free from clinical or ophthalmological evidence of cerebral arteriosclerosis; his blood pressure was elevated (195/120) but neurologically he was intact.

On Jan. 12, 1945 the patient was given his first electro-shock treatment. It consisted of the passage of a current of 120 volts for 0.2 sec. through the lateral frontal skull area. There was a minor reaction (non-convulsive). A second stimulus of 125 volts (0.2 sec.) applied a minute later also led to a minor reaction but the patient was only dazed. A few minutes later he became fifteen minutes.

* From Alfred Ullman Laboratory for Neuropsychiatric Research, Sinai Hospital, Baltimore, Maryland.

markedly overactive and could hardly be restrained. This restlessness lasted some

On Jan. 18, 1945 he received a second treatment consisting of 90 volts through 0.5 sec. which resulted in a minor reaction. This was immediately followed by a second application of 100 volts through 0.5 sec. which resulted in a major reaction. Upon regaining consciousness the patient became overly aggressive, overactive, noisy, and combative. This continued for half hour, long enough to exhaust all who were in attendance.

A third treatment given Jan. 23, 1945 was followed with similar reactions on the part of the patient even though the same dosage (100 volts through 0.5 sec.) led only to a minor reaction. Between treatments, however, the patient showed a marked improvement having become less agitated, quieter, more cooperative and later able to sleep.

Three more treatments were given with similarly exciting reactions.

Following his seventh treatment, while he was still asleep he was injected with 2 cc dial in the hope that this would allay his irritability. Upon awakening several minutes later, however, he was just as excited as after his previous treatments.

His eighth treatment was immediately followed by a large dose (4 cc) of dial but this, too, failed to influence his irritability. It did, however, keep him asleep for the rest of the day after the combativeness subsided. In the meantime his improvement continued. He no longer complained of being sick. He slept 9-10 hours nightly and after a six month period of impotence, now displayed a normal sex urge.

On the ninth treatment the patient was given an intravenous injection of 4 cc., 5% aqueous solution of pentothal sodium and he promptly dozed off. For a moment the corneal reflex was absent but within a few seconds this reflex could again be elicited. At this moment a current of 110 volts through 0.5 sec. was passed and a minor (non-convulsive) reaction resulted. Twelve minutes later the patient awoke, was completely quiet, full of smiles and became markedly affectionate. His wife who had witnessed his previous irritability and combativeness remarked with genuine elation, "It's a miracle!"

Since then the patient received three further treatments administered in similar fashion and in each instance reacted as pleasantly. Following this last treatment his wife reported that he is "as normal as he ever was except for a mild memory disturbance. He enjoys people but speaks of having been in a trance for the last six months." He recognizes a lapse between what he knew six months ago and what he is aware of now, e.g. the war situation and other current events.

Discussion

From the psychiatric standpoint it is noted that each time the patient was threatened physically or economically, he lapsed into a state of depression. It is further interesting from the standpoint of the genetic development of psychopathological conditions that after several uncomplicated attacks of depression, the patient finally lapsed into a state of marked hypochondriasis which in turn ushered in his final depression. A vicious cycle was thus established.

The patient was referred for treatment by his physician because of a supposed "cerebral arteriosclerosis" but since a survey of his mental status disclosed an intact sensorium and no evidence of advanced cerebral arteriosclerosis it was decided, in spite of his hypertension, to treat him by the electric shock method.

His violent overly aggressive reactions were at first disconcerting but when it was recalled from shock experiments on rats that convulsions induced in these animals could be controlled by dial this drug was used following the application of the current in this patient. The relatively slow effect of dial, however, made a more rapidly acting barbiturate necessary and based on experiences elsewhere[1] pentothal-sodium was used.

It is interesting to note that while prolonged administration of pentothal tends to raise the blood pressure, the short duration for which it was used in this hypertensive patient had practically no untoward effect upon him.

If the usual convulsing dose of current is applied at a superficial depth of narcosis as

indicated by the onset of spontaneous movements in the anesthetized patient, a convulsion will result. If on the other hand the level of narcosis is such that spontaneous motor movements are not yet evident, this same electrical dosage will not produce a convulsion. In order to obtain such a minor (non-convulsing) reaction the intact corneal reflex may be used as a time indicator.

This observation is important from phylogenetic, physiological and pharmacological points of view. Phylogenetically, it is known that the corneal reflex pathway is an older mechanism than the volitional motor system. Hence, during the process of recovery from deep narcosis the corneal reflex recovers earlier than the pyramidal (volitional motor) pathway. From the physiological and pharmacological angles one would expect the electrical stimulus to be less effective on a system (volitional motor) which was still under the influence of a narcotizing agent as indicated by motor quiescence.

From the practical clinical standpoint one wonders whether the sleep-electro-shock treatment described would not be beneficial for patients who did not become overly excited following ordinary electric shock. This question is raised because, in spite of the beneficial effects attributed by some[2] to non-convulsive electro-shock therapy, it seems to be the growing opinion that best results are obtained in those patients reacting with convulsions[3]. In the latter cases it may be that the convulsion is not so much the beneficial factor as is the higher dosage of electricity which is required for producing the convulsion.

From experience recently gained with a small series of patients subjected to sleep-electro-shock therapy the results so far are as promising in the absence of convulsions as in other patients convulsed by the usual electro-shock method.

That others have also been confronted with the problem of dealing with the overly excitable reactor is indicated from the recent discussion by Wortis and Kalinowsky[4] who resorted to the use of sodium amytal and other barbiturates in an attempt to diminish the post convulsive reaction.

Summary

Because of psychomotor excitability as manifested by excitement, agitation, restlessness, shouting and combativeness displayed by some patients following electro-shock therapy, this treatment was modified by the preliminary intravenous injection of pentothal sodium. Using the corneal reflex in such somnolent patients as a time indicator the previously determined convulsive electrical stimulus is applied to the frontal skull areas. The resulting reaction is usually minor or non-convulsive. When the current is applied at a somewhat higher level of consciousness as indicated by the onset of spontaneous movements, a major, convulsive reaction results. In either case the patient awakens in a quiet mood and displays a calm and friendly attitude.

Because formerly convulsing doses of electricity can be applied during this sleep-electro-shock therapy without the induction of convulsions and because patients thus treated seem to respond as well as others convulsed by orthodox electro-shock, it is suggested that the convulsion may not be an essential factor in the treatment.

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Is a Diagnostic Clinic for Alcoholics a Necessary Part of a Sound Community Program?*

ROBERT V. SELIGER, M.D.
Baltimore, Maryland

Medical doctors consider alcoholism a medical illness—not a disease entity in itself, but symptomatic of a medical psychological disturbance which may be mild and benign or severe and malign.

Dr. John C. Whitehorn, professor of psychiatry and director of the Henry Phipps Psychiatric Clinic of the Johns Hopkins Hospital has made remarks pertinent to this problem. He writes:

"We may usefully employ the term medical psychology to designate theoretical formulations about human nature, in its pathological and normal aspects with respect to psychotherapy, together with the factual knowledge which these formulations try to represent. The term medical psychology carries the verbal implication that it is a branch of psychology, but there is not, in fact, the actual relationship so implied. Psychology, as an academic science developed in university departments, even when cultivated by persons of medical training and psychological interest, has in general avoided the therapeutic relationship as a field of study and psychotherapists have found relatively little use for much of the material dealt with in the ordinary college courses in psychology. Indeed, one of the major concerns of academic psychology has been the self-conscious aim of developing a scientific status and methodology, and for such purposes, there are many fields of study more appropriate than psychotherapy. The scores of graduate students, for whom doctoral theses must be suggested or approved, must find something simpler to work on. A further reason for the divergence of academic from medical psychology arises from the fact that neither the student nor the professor has access to the strategic position of the physician for the study of the therapeutic process and of the aspects of human nature which are revealed therein. It would not be accurate, then, to say that medical psychology is the application of the principles of general psychology to medical problems and situations. Medical psychology has been practically a separate and distinct development. Its assumptions and theories concerning human nature, and particularly concerning the determination and motivation of human behavior, have been different."

With these comments on the term medical psychology as a guide and with the fact that we consider alcoholism a medical psychological symptom illness or disturbance, the question posed in the title may be answered in the affirmative without further ado, provided the community has proper and sufficient "receiving stations" for those who come for help with this symptom-complaint.

Even without a completely staffed "receiving station," an alcohol diagnostic clinic can be a great help in any community. Where little treatment or other aids are at hand for patients with alcohol problems, a clinic will stir up community interest by bringing home the knowledge that much is wanted but nothing is there. It has been demonstrated that an alcohol diagnostic clinic serves the community from many angles, viz.: understanding, education, diagnosis, treatment, guidance and referral.

It is the responsibility of the clinic to disseminate medical facts to educators in the community regarding alcoholism. This can be done by talks to audiences of doctors, medical students, nurses, Red Cross workers, veterans workers, social workers, the clergy and teachers. Talks should be given and scientific material made available to wets, drys and damps. The outgrowth of education is understanding. The facts should

* Read at the Conference on The Prevention and Treatment of Alcoholism held under the auspices of the Committee on Alcoholics of the Welfare Federation of Cleveland and the Research Council on the Problems of Alcohol, New York, in conjunction with the Annual Meeting of the American Association for the Advancement of Science, Cleveland, Ohio, September 12 and 13, 1944.

be brought out in the community in addition to being given to mates and relatives and those who come to the clinic. It must be emphasized that an alcoholic is a sick man, with sick emotions and personality deviations which cause him to use the easily available drug, alcohol, to narcotize his psychic pain. These individuals and groups should be informed and made to believe that the man addicted to alcohol is not necessarily a degenerate, a drunkard, or a bum to be incarcerated like a common criminal.

An alcoholic is partly a product of our civilization and culture. He has an individual make-up and intelligence, early hurts and memories, likes and dislikes. He must be treated as an individual. Alcoholism is not a dissipation but a symptom of an underlying personality interpersonal relationship difficulty illness. The victim of an uncontrollable desire for alcohol is ill and requires treatment and above all consideration. In spreading education and understanding, social workers and the sociologically-minded citizenry should bear in mind that the culture and social structure of our times aid and abet the symptom-complaint of alcoholism. Noteworthy in this regard is Dr. Robert Fleming's report (1937) of a decrease of 80% in arrests for alcoholism over a 25 year period in England, due, Dr. Fleming believes, to:

1. Social legislation.

2. Labor receiving equal rights and equal responsibilities with capital and management.

3. Legislated restricted hours of sale of alcoholic beverages.

4. More diversion on an active participating level for working men and women.

5. Temperance societies, active social service work with the individual and the family unit.

If such a program accounts for the good results achieved in England prior to the present war, these measures require full investigation so that we may be aided in our efforts to decrease the number of individuals with this symptom-complaint.

Formation of an alcoholic diagnostic clinic (A.D.C.) is fundamental. Such a clinic can incorporate the cohesive elements of the family, home and church to aid in cultural reorientation. The thoughts, feelings and plans of these institutions will be accepted and transmitted by the alcohol diagnostic clinic and in this way it will be helpful to the community. The A.D.C. will be even more helpful if associated with a modern functioning medical or health center, although in special instances it may be necessary to have it stand alone or as a unit of a community chest program. The A.D.C. as an out-patient unit of a medical or health center staffed by a director (preferably a medical man), a medical psychologist, a psychologist, a Rorschach worker and social workers is usually most efficient.

Dr. Whitehorn referring to the social workers recently remarked: "The psychiatric social worker, in addition to her important fact-finding functions, serves other psychotherapeutic purposes which may be roughly indicated under three headings: (1) Managing and keeping account of changes in the material environment of the patient (home conditions, economic assistance, foster home care, employment, etc.). (2) Influencing attitudes in the patient's interpersonal environment (allaying the oversolicitous mother, clarifying troubled family situations, modifying teacher attitudes, etc.). (3) Direct therapeutic influence on the patient."

The clinic should have available general information and statistics regarding alcoholism and allied problems, so that questions can be answered quickly and accurately. The functions of the A.D.C. are not confined to information and education. It has an even more important place in examination, diagnosis and treatment. Patients are brought, taken or come to clinics for help in varying stages of behavior: The de-saturated periodic or chronic alcoholic, the acutely intoxicated with either excitement, stupor or convulsions, with delirium tremens, with acute or chronic alcoholic hallucinosis, acutely or chronically psychic including various deteriorated conditions, such as simple dilapidation and deterioration, Korsakoff's psychosis or personality and ethical deterioration, those with chronic al-

coholic depressions, and others with paranoid trends and developments.

A psychiatric examination is made on all patients in varying degrees depending on the accessibility of the individual in the acutely intoxicated condition. With those who are too upset or unmanageable, a brief psychiatric consultation is usually had and the patient then admitted to a psychopathic hospital where, after being de-saturated, he becomes accessible and can be studied in a non-intoxicated state.

A complete biographical history is taken, including place of birth, place in the family, developmental data, history of any illnesses, operations or accidents, education and work records with attention to any failures, frictions, strains or difficulties and present occupation and financial status. The history also includes psychosexual development, marital status, children and any problems associated with them or the mate, religious training and feelings, social adjustment or difficulties (especially those with the law) and important facts about the parents and siblings and any familial diseases.

A mental status examination makes note of general appearance, behavior, manner and stream of talking, mood statement with emphasis on sleep, food intake and weight, disturbing physical aches or pains, spirits, special preoccupations or disturbing thoughts. The sensorium is tested with attention to general information, remote and recent memory, judgment and insight as to why the patient drinks and his behavior.

A neurological examination is conducted to test the reflexes, pupils, speech, gait and handwriting. In some instances blood or other physical tests and intelligence and personality tests are made.

Further data is obtained by the social worker from relatives and friends concerning the over-all situation. All this may be supplemented by the psychologist making a Rorschach Analysis, Thematic Apperception Test, Wechsler-Bellevue or Associated Word Test or the Kohs Block Test or sometimes using the direct questionnaire as in the Bernreuter California Personality test, etc.

We have found the Rorschach Analysis of utmost help, especially in borderline cases, in determining whether a patient had organic brain changes, whether he was psychotic in spite of apparently controlled behavior, other than alcoholism, or whether he was a full blown psychopathic alcoholic. The Rorschach is a projective technique and enables one to sort of X-ray the personality structure of an individual and to reveal his conflicts if present and at times to bring out early psychic hurts, hostilities and/or attachments.

In the physical examination, including the neurological and blood-test, it is often necessary to record the brain waves to further help in determining the presence of organic brain disease.

With all this data we are able to discover clues to why the alcoholic patient requires a narcotizer and also from a practical point of view to determine whether we are dealing with a situational alcoholic, a maladjusted alcoholic, a neurotic alcoholic, a psychotic alcoholic, a deteriorated alcoholic or a totally constitutional inferior, the psychopathic alcoholic.

The A.D.C. attempts to treat only patients who fall into the situational, maladjusted or neurotic groups. They must have average intelligence or better, a non-damaged brain (from evidence supplied by the Rorschach and brain-wave recording), emotional maturity in some life-spheres and social and business contacts in which the alcoholic association is not continuously close. The acutely psychotic and intoxicated individuals are placed in psychopathic hospitals and studied along similar lines after they have been de-saturated.

There is individual study and personality formulation and treatment of the patient through distributive analysis and synthesis, preceded by a biographical history of the patient, formal mental status studies, and a physical examination, including a neurological survey. Distributive analysis is the most natural means of correction of personality difficulties on a psychologic basis. The goal of treatment is the synthesis of the various factors and strivings which offers the patient security. In this, the patient's symptoms are considered and evaluated, his problems

talked over and his memories, imaginations, urges, strivings, attitudes and actions and reactions to situations thoroughly discussed. In this way the physician distributes the analysis along the various lines indicated by the symptoms, complaints and problems. The physician translates general principles of living into simple, concrete, practical methods of altering life patterns and situations. The patient, through systematic ventilation, objectifies his problems and becomes desensitized to certain topics and factors. Through analysis he is made aware of his shortcomings and failures and the physician can reach out a guiding hand.

Personality disciplining, the teaching of intellectual domination to replace mood domination, the study and guidance of the minutiae of life day by day through the analysis of concrete personal individual experiences and the discussion of the personality liabilities of the past are covered in the interviews.

Those patients who have primary or secondary psychopathology and who from their behavior need more or less permanent protection are referred to a private or public mental hospital. For those who are emotionally ill it is suggested that they go to modern private psychiatric hospitals, in which the physicians have sufficient time to study the patient carefully and to make a thorough investigation of the personality, with due attention to the physical status of the patient. At such hospitals personality factors which are responsible for the use of alcohol and for its habit formation are often elicited and re-education along individual lines can be started while the patient is still in a protective environment. An in-between group, the individuals who are not too ill emotionally from the psychiatric point of view, can in some sections of the country be advised to go to specialized farms.

Only voluntary patients of average or better intelligence without permanent brain damage are selected for farm treatment. This should be a non-institutional arrangement in an isolated location away from taverns or saloons. The farm offers persons in need of temporary protective environment an opportunity to learn that they can live without alcohol by actually doing so under non-institutional conditions that approximate those of normal life. The treatment approach involves: (1) giving patients an understanding of the nature of their problem and an insight into the cause of their drinking, while protecting them temporarily from the strains and influences of their customary environments; (2) helping them discover other ways of dealing with life situations and emotional demands underlying their desire to drink; (3) helping them to develop a new pattern and rhythm of life through a planned routine of daily activities and to build up morale and physical health with pleasant surroundings, good food, formal relaxation practice and outdoor exercise; (4) suggestively directing their interest and thought association processes into new channels and diverting their thoughts and feelings from the entire problem of alcohol; (5) re-education along common sense lines involving certain views, attitudes and insights into their problem.

Treatment should be individual in nature and undertaken with kindness and sympathy, excluding ideas of punishment, fears of failure and attitudes of inferiority, from the patient's mind. All members of the staff should be abstainers.

I have been associated with an A.D.C. at the Henry Phipps Psychiatric Out-Patient Department and from my experience draw the following illustrative cases:

In June, 1939, a 60 year old white widowed female was brought by her daughter to the Clinic. The daughter, also alcoholic and a patient of mine, was financially unable to provide independent facilities to support the mother (who had spent $7,000 on liquor in the past 18 months) nor was she able to be at the daughter's home because of her behavior. The daughter therefore appealed to Family Welfare for help and this agency made an appointment at the clinic, stating that they were willing to provide relief if warranted, but would take no steps until they received a report from the clinic.

We made a thorough examination and recommended six months hospitalization at Cambridge State Hospital. The patient was sent to the hospital and made good recovery

and progress. She learned to abstain, learned better how to handle her interpersonal relationships and, in spite of her age and previous history of many years social drinking, was discharged, obtained a job and has not had a drink in five years.

Several years ago on a cold January day, a 42 year old male, married, white, childless journalist came voluntarily to the dispensary stating that he was a chronic alcoholic and had been on sporadic drinking sprees for 18 years. For a 7-year period there were monthly drinking bouts and five years prior to seeking our help he had lost his job due to drinking. He had then visited a psychiatrist in New York who told him that he drank because he was emotionally immature, the result of a sheltered youth and the death of his father when he was 14 years old. The patient accepted this explanation, wrote an article entitled "How My Drinking Led Me to Psychiatry" and resumed work in the public relations field. Since the psychiatrist had discovered the reason why he could not handle alcohol he believed that he could resume social drinking and in six months he found himself in worse difficulties than ever. When he came to the Clinic he had developed into a solitary drinker, consuming one-half to a pint of whiskey daily. The man was examined, privately interviewed and referred to follow-up.

It is interesting that at the end of the first week it was noted: "Patient returns much improved, has stopped drinking and his shakes have cleared up a great deal. Patient desires to cooperate and we will continue our study of the individual, his problems, his hurts and his reactions to all of these. From the material gathered up to this time, the outlook for permanent improvement does not seem bright."

However, we followed this man in the dispensary for three months, during which time he wrote a full history, with a discussion of likes, dislikes, assets, liabilities, goals, ambitions, etc. Psychotherapy was conducted on an intensive basis and the underlying depression and feeling of being a detached observer and not a participant in life was treated through means of common sense re-education, ventilation and de-sensitization.

At the end of this three months he was transferred to private office for the purpose of lengthier and more frequent interviews. At no time was any medical psychiatric fee charged. Within 9 months after the initial examination, he was earning $60 a week, was totally abstinent, healthier and happier than he had been for years. At the present time he is making $200 a week in a responsible position. He has not had a drink at any time since establishing contact with us.

At the present time another dispensary patient, a 31 year old college graduate married woman is a paid worker at one of our social agencies and doing an excellent job. She came to the Out Patient Department in the summer of 1942, shortly after arriving in Baltimore from another city. She stated that she needed help in her marriage, that she had drunk too much in the past and was afraid if she did not get help she would resume drinking or have a mental illness. When asked why she came to us she replied that she could not afford a private doctor and that she believed community service should be available to people lacking money but not reasonable intelligence and a sincere desire and need for help.

In these three cases, chosen at random, definite community services were rendered through an A.D.C. In the first case, through our referral to state hospital, a successful rehabilitation was made of a seriously alcoholic 60 year old woman (now 65) who would otherwise have been on relief. In the second case, through the follow-up clinic, a talented journalist was rehabilitated. In the third case a young married couple was benefited through a community service and the community is benefited through the patient's able work at the social agencies.

SUMMARY

The functions of an A.D.C. are education, understanding, examination, diagnosis, placement and treatment. The A.D.C. should be a training center for workers in this field of medical social health through teaching doctors, medical students, nurses, social workers and others to educate, inform and encourage public understanding of the fact that alcoholism is a medical psychological problem and that the alcoholic is a sick man.

Rorschach Studies on Combat Fatigue*

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and
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This paper presents the results of Rorschach studies on twenty-five men who entered this hospital with the diagnosis of FATIGUE, Combat. They were referred by the doctors in charge to the psychologist for routine study, except in a few instances when the man seemed to the Medical Officer to present a particularly interesting picture, or, in one case, when the patient himself asked to be included in the group. No other criteria of selection were used. Each man was given an intelligence test and the Rorschach soon after his admission. Thirteen patients were retested on the Rorschach just prior to their separate returns to duty.

The Wechsler-Bellevue Adult Intelligence Scale was used in all cases except two where the Shipley-Hartford Retreat Scale was substituted. The median intelligence quotient fell between 110-120 with twelve men so rated. One scored slightly above 120; eight earned ratings between 90 and 109; four scored between 80 and 89. In this last group it was believed that two men were so disturbed at the time as to be handicapped generally on the test. It will be noted that the extremes of intellectual ability are not represented in the group, but that otherwise a fair distribution of capacity was obtained.

Analysis of the scores on the subtests of the Bellevue Scale yielded only one fairly common characteristic—inability to reverse digits at the level established by the individual in other fields. In fourteen cases there was marked failure on this particular test. Even from superficial observation of these patients one would expect this type of direct mental control to be difficult for them. It is surprising, indeed, that there was no consistent lowering of scores on any other subtest.

In chronological age the men ranged from 19 to 35 years, with a median age of 22 years. Their Naval ratings varied through the Seamen and Petty Officer classifications, but all were below the status of Chief Petty Officer.

Most of these men had in common the experience of losing their ships, often after repeated combat experiences. All of them, of course, had been in active battle situations. Their last combat experience had, without exception, taken place several months previous to their admission to the sick list. Some had spent periods of time in overseas rest camps. When they returned to this country they were given survivor's leave. The return home and the contacts with civilian life were accompanied by varying degrees of lionizing, disillusionment, and disappointment in personal or general conditions. Most of them, however, fulfilled their time of leave and reported to their new stations of duty, and only then turned in because of emotional disturbance, physical distress, or, involuntarily, due to misdemeanors. There is a difference, then, between these men and those cases of combat fatigue reported from advanced base areas. These men had been far removed from actual combat for some time. Combat itself did not immediately precipitate an acute disorder. Each of them had several months during which his problem was not given direct recognition and he dealt with it in his own way. There is reason to believe that in the elapsed time many of these patients had become relatively fixed in neurotic compensatory patterns of behavior, and that they consequently present a complicated problem for psychiatric therapy.

Clinically the group presented common symptoms, in greater or lesser degree. They showed an over-reaction to loud noises, suffered insomnia, were tense and conscious of a need for superimposed control. They were

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irritable, depressed, bothered by feelings of guilt. Some felt an exaggerated social timidity.

An averaging of the original Rorschach scores does not yield completely significant results, since there was no pattern which was uniform for all twenty-five men, and the aberrant factors in one record tend to cancel out and conceal those in the next. However, there are some consistent trends away from the accepted Rorschach "normal." The following table gives the main deviating characteristics and the number of records displaying them:

Less than 25 responses	24 records
Less than 2 M (Human movement responses)	20 records
F% above 50 (Use of form alone)	19 records
Narrowed Experience Range (Human movement: Color)	19 records
Rejection of 1 or more blots	15 records
Color shock (Blocking and disturbance)	13 records
FM (animal movement) greater than M (human)	13 records
Overemphasis of W (use of the whole blot)	12 records
Overemphasis of Dr and S (use of minor details and white spaces)	11 records
FC (Form controlled color) responses entirely absent	12 records
A% (Animals perceived) greater than 50	11 records
Discrepancy between primary and secondary Experience Ranges. (Human movement: Color ratio showing a different trend than Animal movement: Texture)	10 records

In descriptive terms we can say that these men were not concerned with quantity production, but for the most part were anxious to "get it over with." In addition, there was very little of the complicated organization found in the responses of superior, normally adjusted men. Either they tended to overemphasize quick, structural, relatively crude wholes without breaking the blots up into the usually noted sections, or they showed more than the expected amount of interest in minor, rarely used sections. Control was overemphasized and there was a marked restriction of spontaneity and imagination. When expressions of inner adjustment trends occurred they were largely of a relatively childish, immature variety. Blocking was frequently an accompaniment to color shock. FC responses, the representatives of successful affective adaptation, were entirely lacking in several records. The range of content references was apt to be narrow and stereotyped. In several instances there were indications of a shifting away from or toward extratensivity (or introversion) which reflected a changing orientation.

No record of the twenty-five presented the patterns accepted as indicative of good adjustment. All of them showed neurotic characteristics to some extent, although a few were near-normal. Using the Harrower-Erickson[1] signs of neurosis, five or more were apparent in fourteen of the records. Only two of the records showed less than three of these "signs." When checked against the weightings recommended by the Rosses,[2] twelve records were heavily weighted for instability, and seven showed excessive weighting for disability (organic type disturbance) although physical and neurological examinations had been negative.

It was clear on inspection of the records that several different types were represented. Accordingly, grouping was attempted. Each man was rated by his Medical Officer according to his previous adjustment. Three rough classifications were made:

1. Well-adjusted in civilian life and in the Navy ..... 14 men
2. Moderately well-adjusted, with only minor deviations ..... 9 men
3. Previously maladjusted ..... 2 men

As would be expected, grouping on this basis yielded the same cancellation of significant deviations in the Rorschach as did

the averaging of all records. A further judgment was obtained from the psychiatrists on the stability of each man's family background, with division into two groups: (1) those from homes, which, according to the records, were completely stable; and (2) those whose family history included some potentially upsetting factor—from a neurotic parent or a broken home on through obvious, gross disturbances within the family. Numerically about half of the patients fell in each of these classifications.

The medical officers also expressed opinions in some cases as to the severity and type of disturbance, and here a basis for grouping was found. However, every attempt was made to keep the essential Rorschach pattern as clear as possible, and the groupings which follow were eventually based on certain elements of the records themselves rather than strictly upon the doctors' informal categories.

Group I. Eight records presented a consistent picture of anxiety neurosis with strong depressive coloring. In all eight there was an overemphasis upon the use of minor, rare details; control (use of form) was overused but occasionally inefficiently; and expressions of imagination and spontaneity were severely restricted. Form-color responses were minimal (never more than 2), and there was a complete absence of any more impulsive use of color. Human movement responses, when present at all, did not exceed one per record; and except in one record animal movement concepts did not occur more than twice. A disproportionate perception of parts of human and animals rather than the whole figure was definite in four records. Texture and diffusion responses were scattered and numerically few.

Seven of these eight patients were designated as "very sick—depressed" by their Medical Officers. Six of them were rated as previously well adjusted and from stable backgrounds. All of them were easily upset and conscious of a constant need to exercise rigid self-control. (Fig. 1.)

Group II. Another group of five was apparent. Of these, three were rated as well-adjusted while two had been only moder-

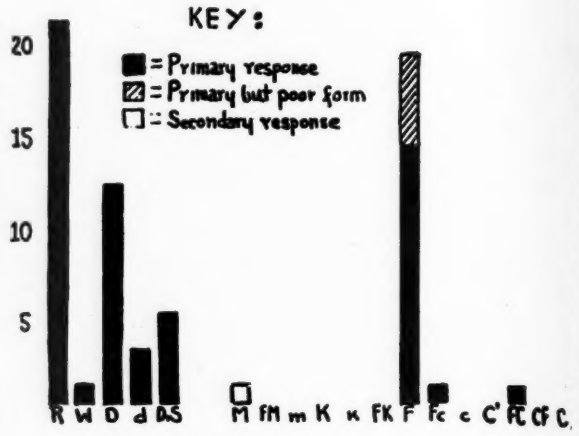

Fig. 1. Sample Psychogram, Group I

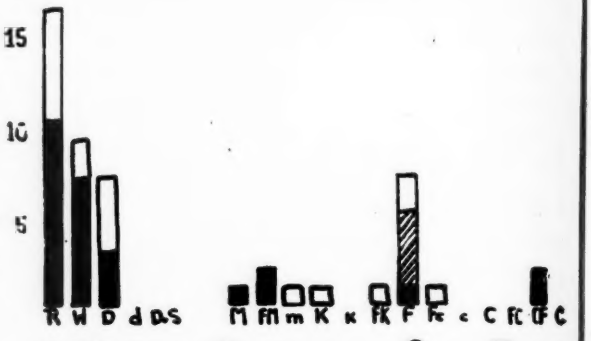

Fig. 2. Sample Psychogram, Group II

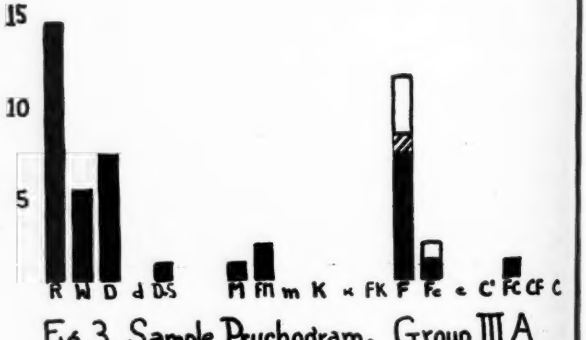

Fig. 3. Sample Psychogram, Group III A

Fig. 4. Sample Psychogram, Group III B

ately adjusted according to their histories. Two were regarded as "very sick"; of one his doctor said, "This patient may eventually develop symptoms of hysteria;" and of the other, "He is becoming fixed on a somatic complaint." This group presented a composite picture similar to that of the hysterical neurotic type. Responses were few and emphasis was upon crude, whole perception of the blots, with frequent use of poor form (good form usage: total form usage equaled 62%). Pure form was not overemphasized, and the Experience Balance formula showed dilation rather than restriction. The basic orientation was extratensive and response to the highly colored cards showed a prevailing shock, impulsiveness and lack of control. Expressions of anxiety were almost entirely lacking, depressive tendencies were minimal, but inner conflict (inanimate movement) was suggested.

These men showed no gross hysterical symptoms. It is suggested merely that they were potential subjects for this type of reaction. In their Rorschachs there were occasional variations from the dominant pattern toward that which is found in anxiety states, with a mixture of the two which conveyed an impression of irresolution. (Fig. 2.)

Group III. The third major group consisted of ten records showing the general patterning of anxiety neuroses without evidence of depression and with very little expression of anxiety in diffusion or texture responses. This group was further divided according to the direction of major expression: seven records which are primarily introversive make up Group IIIA; and three extratensive records constitute Group IIIB. (Fig. 3 and 4.)

The introversive records consisted of few responses, showed an emphasis upon crude, structural wholes, used a fairly heavy degree of intellectual control (form usage percent—56) and in their limited number of movement responses showed a definite domination of the less mature type.

Form use percent in one of these records was very low. All the others in the group scored above 50% in this respect, while this man's percentage was 27. He showed an exceedingly high FM (animal movement) column, however, and it was apparent that he was exercising a type of control by projecting his emotions and conflicts. He reported, for instance, "sheep looking fearful, about to take off;" "insects crawling;" "two dogs fighting and with the card upside down two dogs kissing," etc.

The three extratensive records display extreme constriction, with the primary experience balance formula very restricted, and the secondary formula showing dilation caused by a few uncontrolled texture responses. In this group as with those records in IIIA the percentage of responses to the brightly colored cards, indicating the degree of susceptibility to stimulation from without, was not always consistent with the trend indicated in the inward-outward orientation formulas.

With one exception the patients in this group were considered less disturbed than those in Group I and some of those in Group II. Their difficulties were milder. Five were rated as previously well-adjusted, three moderately well-adjusted, and two were in the "maladjusted" category.

Unclassified. The remaining two records defy attempts at classification. One man was extremely defensive and habitually displayed a crude vulgarity in speech and manner. He made poorly defined, perseverative responses of a sexual content, with a resultant record which approached the schizophrenic pattern. The other patient showed only slight aberrations from the normal on his first use of the cards, although later, on a retest, indications of depression and egocentricity became more marked.

In the first few of these records enough combat-connected references were made to warrant an investigation of their significance. For instance, one man began with a "plane" on Card I, saw a bursting bomb on Card II, then arms, legs, and other parts of human anatomy throughout succeeding cards, until he concluded the series with a bitter "nightmare" on Card X. It was soon apparent, however, that this was not the general rule, and also that the presence or absence of one or two such references had

little to do with the depth of disturbance. Most of them were less dramatic than the record referred to above:

Card II—"This looks like my sore ankle, a salt water sore."

Card VII—"This is a map of —— Bay, and our ship is under the water right here."

Card VI—"A shell bursting in water."

Card VII—"The plate of a ship after a 'fish' has hit it."

RETESTS

Thirteen of the men were retested on the Rorschach just before returning to duty. Each man was told that the repetition of the test was for purposes of experimentation, and asked to act as if he had not seen the cards before, that is, to repeat those responses which occurred to him, to add any others, and not to make any special effort to remember exactly what he had seen previously.

The intervals of time between the first and second tests varied from one and one-half to three months. Outwardly the patients showed improvement. They were calmer, their sleep was relatively undisturbed, and other clinical symptoms had diminished. With few exceptions, however, they were frank about their unwillingness to return to sea duty. In addition, although as a group they had been unusually incurious about the inkblots, and although no explanation of the purpose of the test had been given them, several were quick to volunteer the opinion that no change would be apparent.

At this point it must be stated that the retest results, elaborated below, should not be too widely applied. Several factors were operative with this particular group which disrupted the treatment program. Many of them had been members of the same ship's crew, and the new ship to which they had been assigned was still in the vicinity of the hospital. A demoralizing spirit was engendered among them, fostered both by their sense of being part of an exclusive group and by their contacts with friends who were still on active duty. Some of them hung on to their symptoms at so nearly a conscious level that it at times almost approached malingering. A large number of other patients followed their example, and the space facilities of the hospital became inadequate to handle effectively the large nucleus of discordance. This, of course, was not of primary importance in all cases, but an undercurrent of bravado, wilfull disregard of treatment aims, and the intent to remain on terra firma was noticeable through the Combat Fatigue treatment unit. It would be impossible to evaluate its effect upon separate individuals.

All of the second records showed minor changes, but none showed the normal patterning. There was a jockeying of relative values and emphases, in some cases toward the accepted norms, and in others away. The number of responses decreased in only two instances and a shift in apperceptive emphasis was common to all. This is to be expected in retesting,[3] but the shift did not always follow the pattern indicated by studies of the second records of normally adjusted individuals. One man showed a marked increase in whole-blot responses; three showed excessive increase in emphasis upon tiny, unimportant sections of the blots. With these two exceptions—increased number of responses and shift of apperceptive emphasis—there was no general, consistent change. There were three marked jumps in form-use percent, one definite drop, and in three other cases, although the F% remained the same the quality of form perception improved greatly. Other noteworthy changes concerned the degree of stereotypy and the other content ratio—wholes to parts of human and animal figures.

To illustrate, one retest from each of the groups designated will be discussed. "A" (Group I) showed excessive rigidity on his first test. He made one human movement response to Card II. Two additional m's were scored on concepts involving awareness of threat—("Something Edgar Allen Poe would write up if he went off on one of his mad drunks, something that flies"—Card V). With those exceptions his responses were based upon form alone. In his second record a second human movement response emerged; animal movement responses, though secondary, showed a marked increase; there was one texture re-

sponse, and two aggressive uses of color ("blood"). The picture was still dominated by excessive formalization, but breaks in his rigidity had begun. This young man was intelligent, came from a stable environment, and for personal reasons was anxious to return to duty.

"B" (Group II), previously well-adjusted and from a stable background, showed in his first record a fairly clear picture of the hysterical type. In the second, shading responses disappeared, signs of inner conflict became minimal, the percent of responses to the colored cards increased, and control of color responses weakened to such an extent that he made seven crude color responses, when previously he had made three. His emphasis on major details increased. This second record is the pattern of one who is over-responsive to stimulation from his environment, and though he tries to control his reactions quickly loses his control when the stimulation is at all strong. His anxiety and sense of inner conflict have become minimal and a previously noted introversial potential has nearly disappeared. The hysterical protocol is thus more emphatic and clear-cut.

"C," of Group IIIA, also showed a clarification of the neurotic pattern. Movement and texture responses decreased; form usage increased from 57% to 80%; stereotypy showed a jump although it had already been high; the experience balance formulas contracted; the percent of responses to the colored cards dropped from 50 to 33; and the apperceptive emphasis shifted from wholes and major details to rare and arbitrary sectioning. Comparison of the two records of this patient, then, reveals an increased constriction and a definite loss of spontaneity.

"D" (Group IIIB) showed a definite increase in controlled color responses, some emergent recognition of animation in animal figures, and a greater number of diffusion responses (K). Stereotypy jumped 25%. Form usage percent remained at 70 and the other major formulas showed no significant change. There was, in the two records of this man, a suggestion of growing potentials for adjustment, but his personality was still tightened far beyond the limits of easy, spontaneous adjustment.

The conclusion drawn on the basis of these thirteen retests must, of course, be regarded as peculiar to this particular group of patients, until greater numbers of records can be studied. However, the implication of the findings reported above are not satisfying. None of the patients was well-adjusted when he left this hospital. Several were more fixed in neurotic patterns than at the time of admission. Since improvement in outward behavior was an observable and positive fact one might assume that the change in them was due to the development and clarification of compensatory modes of behavior and not to an absolute clearing of the basic conflicts. One would then wish to know whether in individual cases the pattern will be satisfactory for the man concerned in that it permits him to function adequately. The question also arises as to what the individual Rorschach patterns might have been if a test had been administered before these men went into combat. Most of them had made adequate social adjustments, but many had never been under any severe strain before entering the Navy, and certainly none of them had ever before been subjected to situations comparable to the stress of continuous battle duty. There is a suggestion in these present results that combat fatigue may be the reflection of disturbance of a man's basic personality patterning, and that recovery accompanies the reestablishment of that pattern.

CONCLUSIONS

This series is entirely too small to justify extensive interpretations of the results. As pointed out above, there were certain reasons why this was an unusual group of patients. In addition, their performance since discharge from the hospital is not at hand to justify prognostication. Nonetheless, recognizing these limitations, certain facts in this work are worthy of note. Most of them had been deduced previously from clinical observations, and for that reason are mentioned again here.

1. The "combat fatigue" syndrome is not a pure clinical entity. The psychological

picture appears to be the product of the individual personality's attempt to handle severe grades of stress and anxiety.

2. The development of combat symptoms is not entirely governed in intensity or form by the degree of stress or by the pre-service personality. Certain other factors concerned with morale enter the production of symptoms.

3. Rough groupings of the syndrome may be made into three large groups.

(a) Clinical pictures dominated by anxiety.

(b) Combined syndromes of anxiety and severe emotional depression.

(c) Combined syndromes of anxiety plus evidence of neuroses, particularly hysteria.

4. Retesting supports the clinical experience that men may perform military duty without being entirely recovered from combat fatigue. Learning to control symptoms, then, may be as important as ridding the personality of them.

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AUTHOR'S NOTE—The opinions contained herein are the private ones of the writers and are not to be construed as official or reflecting the views of the Navy Department or the Naval Service at large.

Neurological Clinical Pathological Conference

of the

Cincinnati General Hospital

CHARLES D. ARING, M.D., Editor

CASE NO. 182199

Presentation

On April 2, a 53 year old white man was picked up at a "flop house" by the police, whence they had been called to remove him to the hospital. He had been rooming there for two weeks. Attendants noted that he had remained in bed for the most of this time. When he arose from bed he had trouble getting to the bathroom and had to be aided. On April 2 he was found crawling about the floor of his room, apparently drunk. However, there was no evidence that he had been drinking; he was delirious and his legs would not support him.

A physician who was contacted stated that he had treated the patient for the month previous to invalidism because of ataxia and bladder paralysis associated with tabes dorsalis. His gait had improved and the patient terminated treatment. An employer was found who stated that the patient had worked for five months as a clerk but that he had quit without notice about four months ago sending word that he was unable to walk. This employer thought his behavior was normal at all times. No relatives were found.

The patient gave varying accounts of his present illness and history. There was general agreement in the stories elicited as to weakness in the legs and difficulty in walking. The onset was related as having been anywhere from months to two years prior to admission. It seems there was slow pro-

gression of disability in the lower extremities until from one to four months before entry, when he could barely get about. It was relatively certain that he had suffered periods of intense vertigo, possibly for one or two years. The onset of each attack was abrupt, his environment would whirl about him, he would usually fall and his vision would be dimmed. He was forced to bed by these frequently occurring, vertiginous attacks because of inability to stand. The duration of an attack was not determined. He said there was no paralysis during these attacks and that he had had no tinnitus or loss of hearing. He noted inability to keep his affairs straight which he termed "trouble with memory" for about two years. For one year there had been urgency and frequency of urination with occasional incontinence. Other pertinent historical points of indeterminate duration were muscular twitchings, particularly noticed in the deltoids, loss of weight and frontal headache.

He belonged to a lodge where he had been last seen one month before his admission to the hospital. At that time he told someone there that he was being attended by a physician because of nervousness and neuritis. He had always had "indigestion" with "heartburn" and anorexia, which became progressively worse within the year. His diet had been irregular, and possibly inadequate for months. He told of gonorrhea at the age of 18 years and treatment for syphilis in recent years. There had been a chancre about 15 years ago with desultory treatment, possibly a total of 60 arm and hip shots. He gave a history of social drinking, but never to excess. He had been married for 20 years until his wife committed suicide, prior to which she had had a "nervous breakdown." There had been no pregnancies. Besides clerical work, he had owned a restaurant and after it failed, he had worked in another restaurant.

On April 2, at the admission examination the following abnormalities were noted: He was confused, disoriented and could not maintain his balance in the sitting position. He was bruised, dirty, poorly nourished, weak, noisy, and restless; tended to expose himself and tried to get out of bed. The few remaining teeth were carious; the tongue was coated. The blood pressure was 200/130, and there was moderate peripheral and retinal arteriosclerosis.

He was disoriented, and incontinent throughout his hospital stay. Neurological abnormalities were noted as follows: The pupils were 4.5 mm. in diameter and reacted rather slowly and through a poor range to flashlight. There was a corneal scar on the left. Both convergence and upward movements of the eyes were limited, and there was horizontal nystagmus. There was constant wrinkling of the forehead and bilateral ptosis when the patient was awake. Occasionally hiccoughing occurred. There was moderate dorsal kyphosis. There was marked atrophy of the musculature of the hands with flexion contracture of both little fingers. Atrophy of the muscles of the face and head had occurred, particularly of the temporals. There was in addition generalized muscular atrophy; the limbs were thin. The feet were of the high-arched, neurological type with atrophy of the small muscles. Fasciculations were observed in the muscles of the shoulder girdles.

There was generalized weakness. He was too weak to support himself on his feet. There was no increase in the resistance of the limbs to passive movement. Tests of coordination were performed slowly, but usually accurately. No sensory abnormalities were found with the patient occasionally cooperating fairly well. The deep reflexes were hyperactive; there was sustained ankle clonus and bilateral extensor responses. The jaw jerk was normal.

Psychological evaluation was repeatedly attempted. The day after admission he was rather lethargic and did not want to be disturbed. On April 5 he spoke incoherently and volunteered no information. His speech was a mumble, difficult to understand. He named the month, year, and city correctly. He thought he was in a hotel and did not recall coming to the hospital or his last address. He thought it was night when it was day. He could not retain numbers for a minute. He could repeat five digits forward, none backward and could not perform

serial subtraction. He was accurate on simple addition and multiplication. He was entirely passive; he responded with a smile to reassurance.

He remained listless. Neurological signs were unchanged. Hiccoughing increased in frequency. On April 21 confabulation was demonstrated. His condition deteriorated progressively and lethargy became more marked. He became emaciated and weaker generally and developed decubitus ulceration, literally wasting away. During the last five days of life he responded only to painful stimuli. He died on April 27, on the 26th hospital day.

Laboratory Data: There was a relatively normal temperature, pulse, and respiration record. The blood pressure was 200/130 on April 2; April 4, 140/94, April 6, 148/100 and 195/110; April 25, 120/94. Repeated counts of the blood and hemoglobin determinations were normal. The urine early contained albumin and white blood cells; the use of tidal drainage and sulfathiazole rapidly returned the urine to normal. Blood urea nitrogen determinations were normal on six occasions. Roentgen examinations of the skull and chest were normal. During the performance of a cystometrogram the gradual introduction of 450 cc. of water caused no discomfort; after voiding, a residual of 250 cc. was measured. The blood Kahn was negative on two occasions. Four CSF examinations were performed. The first lumbar tap on April 3 was most likely traumatic since the pressure could not be measured and the fluid was bloody and had to be removed by suction and contained some clot. A second tap was done on April 10. The initial pressure was 110 mm. of water and the fluid was turbid yellow and contained 1890 crenated red blood cells per cmm. The protein was 50 mg.%, the sugar 60, the chloride 707. On April 15 a cistern tap released water clear fluid under a pressure of 100 mm. of water. There were 37 RBC and 1 lymphocyte per cmm. The protein was 30 mg.%. On April 18 a lumbar puncture released clear fluid of normal color, under a pressure of 85 mm. The colloidal gold curve was normal in the latter three fluids, and the Wassermann was positive the two times it was tested, on fluids obtained on April 10 and 15.

Differential Diagnosis

Dr. Milton Rosenbaum: I would like to believe that this case was presented not because it offers a difficult problem in diagnosis but because it represents an unusual form of syphilis. The history though not too adequate offered evidence of venereal disease; gonorrhea and syphilis with inadequate treatment.

We find that this man presented a picture of diffuse nervous system disease. The chronic delirium indicated that the cortex was involved. He had evidence of spinal cord disease. There were fasciculations in muscles which means disease somewhere between the anterior horn cell and muscle. He had atrophy of small muscles in the hands and feet and a degree of muscle atrophy in the face. He had signs of brain stem involvement. Whether the disease was within or without the brain stem is problematical. He had difficulty in converging the eyes and gazing upward. I wouldn't consider those eye signs too seriously; this man was delirious and the chances are that his cooperation was poor. The speech disturbance may be taken to mean brain stem involvement or it may have been due to bilateral cortical involvement. The hiccoughing was, I believe, an indication of brain stem involvement.

It is strange that the patient was able to give such a clear story of vertigo when his other history was so vague. The question might be raised whether he had Meniere's syndrome but knowing that there are other signs of brain stem involvement, I would include the vertigo along with that symptomatology.

In summary there was evidence of disease in the cortex, brain stem, spinal cord and perhaps in the muscles themselves, a pretty diffuse picture.

I would like to say something about the bladder. In the cystometrogram the patient received 450 cc. of water into the bladder without discomfort and he had a residual of 250 cc. The mental state makes it difficult to interpret the cystometrogram in this case. In the atonic bladder there are no emptying

contractions, a finding in patients with tabes dorsalis. In the autonomic bladder one finds a few spontaneous emptying contractions. From the data given about the cystometrogram, I think it is difficult to say whether he had an atonic bladder or whether it was the type associated with pyramidal tract disease. I believe the fact that he did not complain of bladder discomfort may indicate an atonic bladder, but lack of complaint may have been due to delirium.

My first diagnosis would be that this man had diffuse syphilis of the nervous system and that he had a specific type of syphilis, known as syphilitic amyotrophy. The evidence for syphilis was the history of venereal disease without adequate treatment, positive CSF Wassermann, abnormal pupils even though they were not classical. Lues would certainly explain the spinal cord and brain stem findings and of course the mental findings.

There can only be conjecture about other types of neurological disorder. Did the patient have amyotrophic lateral sclerosis with asymptomatic neurosyphilis? From the clinical picture in this case, I don't think anyone can make this differential diagnosis. He was of the age group and had the typical atrophy and pyramidal tract signs. A few things are a bit unusual for amyotrophic lateral sclerosis. Typical bulbar signs such as atrophy of the tongue with fibrillation are missing. As far as the mental picture is concerned, I don't see why delirium shouldn't develop in amyotrophic lateral sclerosis though I think it a bit unusual. Bladder symptoms are also unusual.

Let us say that this patient had syphilitic amyotrophy; one wonders why he developed this unusual disorder and not one of the classical types of neurosyphilis. We have one clue, the neurological feet. I have the feeling that the classical type of neurological foot may indicate congenital neurological difficulty and that persons so afflicted may be prone to develop rare types of neurological disease. Of course, one wonders whether he had neurological signs for a long time. Was his disease congenital? I think the fact that he had got along so well would be against it. I think this man was predisposed to some type of degenerative neurological disease and that neurosyphilis was a conditioning factor.

I think one must consider Wernicke's syndrome as a possible diagnosis in this case. There is the history of gastric disturbance, which might indicate inadequate food intake. Lying in bed for two weeks introduces the probability that he had little food during this period. Also he was a social drinker. With the mental picture, bilateral ptosis and eye signs, Wernicke's syndrome would seem a possibility.

Finally I think it is interesting that this man was found crawling about on the floor, a distinctly rare symptom in neurology. This probably indicates generalized rather than local weakness.

Dr. Charles D. Aring: Do you believe that it takes more strength to walk than to crawl?

Doctor Rosenbaum: Well, he couldn't stand. I think the fact that he was unable to stand is not on the basis of pyramidal tract disease. That brings up the question whether it was because of ataxia. Yet the usual signs seen in patients with ataxia were absent. There was no note of incoordination in the repeated neurological examinations. Possibly the inability to stand was on the same basis as the periodic bouts of vertigo.

My final diagnosis is central nervous system syphilis with syphilitic amyotrophy. There were brain stem and probably cortical changes due to syphilis.

Clinical Diagnosis

Syphilitic amyotrophy.

Doctor Rosenbaum's Diagnosis

Meningovascular syphilis.

Syphilitic amyotrophy.

Anatomical Diagnosis

Meningovascular syphilis.

Syphilitic amyotrophy.

Hemangioblastoma of left cerebellar hemisphere.

Cystitis, pyelonephritis, and multiple infarction of kidneys.

Discussion of Pathology

Dr. I. Mark Scheinker: Gross examination of the cerebral hemispheres revealed nothing abnormal. The cerebellum contained

a large cyst involving the white matter of the left hemisphere. There was some compression of the medulla. There was a small nodule in the posterior extent of the cyst. The cyst was outlined by a wall composed microscopically of glial cells and fibrils. The small nodule was a capillary hemangioblastoma. There were many well developed vessels and angioblastic cells in it, and also small areas of hemorrhage.

The remaining findings confirm Doctor Rosenbaum's diagnosis. There was proliferation of ependymal glia; the well-known granular ependymitis. There was perivascular infiltration of smaller blood vessels with round cells most marked in the spinal cord and brain stem, and less in the cerebral hemispheres. The leptomeninges were infiltrated with lymphocytes. The cerebral cortex showed no inflammatory changes but revealed a certain amount of degeneration of nerve cells.

The findings in the spinal cord were most interesting. No tract degeneration could be found, but there was far advanced destruction of the anterior horn cells. There was chronic leptomeningitis similar to that seen about the cerebrum, but there was moderate infiltration of lymphocytes around the roots.

The muscles were primarily involved in the process. There had occurred marked degeneration and destruction of muscles with proliferation of sarcolemnal nuclei. There was round cell perivascular infiltration of the smaller blood vessels in the muscles. There was a tremendous amount of sarcolemnal nuclei in the areas of muscle degeneration and atrophy. Some of the muscle fibers appeared tremendously swollen. This is syphilitic amyotrophy, a rarely described process.

The anterior spinal artery wasn't much involved so I would hesitate to attribute the anterior horn cell degeneration to ischemia. Neither was there much inflammation of the roots, so that retrograde degeneration because of root involvement appears unlikely.

The visceral findings consisted of multiple kidney infarcts, bilateral chronic pyelonephritis, chronic cystitis with a far advanced atrophy of the bladder muscle. In addition there were scattered areas of necrosis in the cortex of the adrenal glands.

Doctor Aring: As far as I know this is one of the few cases in which the muscles have been examined in syphilitic amyotrophy. The rather routine neuropathologist limits himself to the nervous system and the general pathologist to the viscera. The muscles have not seemed to fall within the province of either of them.

Several points remain to be mentioned. For the benefit of the students it should be remembered that the signs of cerebellar disease may be masked after the patient takes to bed. The best position in which to demonstrate cerebellar signs is unquestionably the upright one.

A point that is always intriguing is the absence of pyramidal tract degeneration in the face of the clinical finding of undoubted extensor plantar responses, or contrariwise, normal plantar responses with deterioration of the pyramidal tracts at microscopy. Combinations such as these may be found in the disease known as progressive muscular atrophy and in amyotrophic lateral sclerosis.

Doctor Rosenbaum: Doctor Aring has touched on an interesting subject. We are apt to think of a Babinski sign as evidence of structural disease in the pyramidal system. Yet there is much evidence that in many cases a Babinski sign develops on a functional basis. By functional, I do not mean a synonym for neurotic as the term is so often misused, but rather a disturbance in function of neural pathways without structural lesion.

Anything that inhibits the highest levels of cerebral integration may produce a Babinski sign. Physiologically it may be induced by temporary disturbances in carbohydrate metabolism while psychologically it may be induced by hypnosis. All of us here have seen moving pictures of a patient of ours who developed a classical Babinski sign when she regressed to an infantile level under hypnosis. Doctor Paul Yakovlev noted that a large percentage of feeble-minded children developed a Babinski sign after long hikes. Certainly the Babinski in those cases was on a functional basis.